

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

Claims 1-6 remain active in the application. The form of the claims has been improved for clarity, but the scope of the claims is believed to be substantially unchanged. Additionally, the improper multiple dependency in Claims 4-6 has been corrected.

Briefly, when grinding a workpiece using plural grinding wheels, one of the grinding wheels may complete the grinding operation prior to the other due to the particular characteristics of the grinding wheel or the portion to be ground. This can have a detrimental effect on the accuracy of the grinding operation because the workpiece deflection during grinding by one grinding wheel is affected by the pressure applied from the other grinding wheel. Since the moment of completion of the grinding by each wheel is not predictable, the deflection of the workpiece will vary in an unpredictable manner and cannot be accounted for. The grinding accuracy is thereby deteriorated.

According to a feature of the invention, on the other hand, the grinding step is performed so that grinding by a predetermined grinding wheel is terminated prior to the termination of grinding by the other grinding wheel. The order of termination of the grinding operations is therefore predictable, and so can be relied upon to control grinding more accurately (see sentence bridging pages 3 and 4). For example, this can be achieved by setting the grinding amount for one of the grinding wheels during one of the coarse, intermediate or fine grinding operations to be more or less than that of the other grinding wheel (see Figs. 4-5). Alternatively, the initiation of grinding by one of the grinding wheels can be set to occur prior to, or after, the initiation of grinding by the other grinding wheel (Figure 6). In each case, it can be assured that grinding by a selected grinding wheel will terminate prior to grinding by the other grinding wheel, so that the workpiece has a more predictable bending characteristic, resulting in greater grinding accuracy.

Claim 1 has been amended to recite this feature with greater clarity. Specifically, Claim 1 recites a grinding method of simultaneously grinding plural grinding portions of a workpiece using plural grinding tools and individually controlling each of the grinding wheels during the grinding step, including a step of controlling the grinding step such that grinding by a predetermined grinding wheel is terminated prior to a termination of grinding by the other grinding wheel. This is not taught in the prior art.

For example, Claims 1-3 were rejected under 35 U.S.C. § 102 as being anticipated by EP '621, particularly at paragraph [0038] thereof. EP '621 discloses a method for machining a workpiece with plural tool heads. Paragraph [0038] describes that when the finish grinding operation is being executed, "in step 126 when either gauging apparatus detect a diameter of the grinding portion became a required value, in step 127 one wheel head corresponding to the grinding portion... is backed off short distance." Referring to Figure 4a, step 126 tests whether the diameter of *either* grinding portion has reached a required value.

Thus, it is evident that EP '621 lacks a step of "controlling said grinding step such that grinding by a predetermined grinding wheel is terminated prior to a termination of grinding by the other grinding wheel." Were this the case, it would be known in advance in EP '621 that the predetermined one of the grinding wheels 14 or 15 will have finished the grinding operation before the other wheel, and there would be no need to test whether the grinding portion ground by an undetermined "either" wheel has reached the required value. Accordingly, the description in paragraph [0038] that "either" of the grinding portions can become a required value is not evidence of controlling a grinding step such that grinding by a predetermined grinding wheel is terminated prior to a termination of grinding by the other grinding wheel. Instead, it is evidence that termination of grinding for either wheel can occur unpredictably and must be tested for on a case-by-case basis. Accordingly, the claims clearly define over this reference.

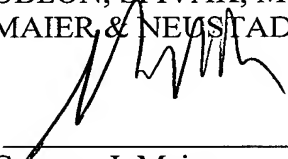
The specification has been amended to correct minor typographical errors therein.

Concerning the objection to the specification (paragraph 1), it is noted that M.P.E.P. § 608.01(p)(B) states that limitations on the material which may be incorporated by reference into a U.S. patent application do not apply to material taken from applications relied upon only to establish an earlier effective filing date under 35 U.S.C. § 119 or 35 U.S.C. § 120. Accordingly, the incorporation by reference of the priority application is not believed to be improper.

Applicant therefore believes that the present application is in a condition for allowance and respectfully solicits an early Notice of Allowability.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Registration No. 25,599

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)
RTP:smi

Robert T. Pous
Registration No. 29,099
Attorneys of Record

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